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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,457	01/14/2002	Marck R. Robinson	760131.401	1018

500 7590 10/05/2005	EXAMINER
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC	KENDALL, CHUCK O

701 FIFTH AVE		
SUITE 6300	ART UNIT	PAPER NUMBER
SEATTLE, WA 98104-7092	2192	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/047,457	ROBINSON, MARCK R.
	Examiner	Art Unit
	Chuck O. Kendall	2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 May 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>7-26</u> is/are pending in the application.

    4a) Of the above claim(s) <u>1-6</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>7-26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Detailed Action

1.   This action is in response to the application filed 05/10/05.

2.   Claims 1 – 6 were previously presented and are being cancelled in this

amendment. The newly added claims 7 – 26 are now pending.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another
> filed in the United States before the invention thereof by the applicant for patent, or on an
> international application by another who has fulfilled the requirements of paragraphs (1), (2),
> and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4.   Claims 7 – 12, & 15 – 25 are rejected under 35 U.S.C. 102(e) as being

anticipated by Williams USPN 6,591,272.

Regarding claim 7, a method in a computer system for providing an

interface between at least one logical view of a relational database and a plurality

of normalized relational database tables having stored data, comprising:

receiving an indication of an operation to be performed on the at least one

logical view (4:55 – 60, see standardized view and logical objects);

automatically determining a corresponding plurality of normalized

relational database tables that were used to construct the at least one logical

view (5:5 – 10, see database tables and rows are normalized); and

transparently and automatically causing the stored data in the

corresponding plurality of normalized relational database tables to be adjusted in

accordance with the indicated operation, thereby automatically performing the

indicated operation on underlying data that corresponds to the logical view (17:52

– 55, see run automatically).

Regarding claim 8, the method of claim 7 wherein the automatically

determining the corresponding plurality of normalized relational database tables

comprises:

retrieving from a definitions file a plurality of stored tables and attributes

that correspond to a join operation used to construct the at least one logical view

(12:60 – 65, see "left outer join").

Regarding claim 9, the method of claim 7 wherein the transparently and

automatically causing the stored data in the corresponding plurality of normalized

relational database tables to be adjusted in accordance with the indicated

operation, further comprises:

retrieving, from a definitions file associated with the at least one logical

view, computer instructions for performing a database insert operation on at least

one of the corresponding plurality of normalized relational database tables in accordance with the indicated operation(5:30 – 33, see inserted); and

automatically performing the computer instructions to adjust the underlying data in accordance with the indicated operation (5:35 – 40, for adjust, see modify).

Regarding claim 10, the method of claim 7 wherein the indicated operation is at least one of a create object or a delete object operation (4:57 – 60, see logical objects and created).

Regards 11, the method of claim 7, further comprising:

receiving an indication of an event from one of the normalized relational database tables (8:61 – 63, see received pseudo object);

determining at least one corresponding logical view that was constructed using the one of the normalized tables (7:30 – 45); and

automatically notifying the determined logical view of the indicated event (7:30 – 45).

Regarding claim 12, the method of claim 7, further comprising:

receiving an indication of an expression that includes at least one of a mathematical expression, a function, an attribute reference, or a conditional operation (25: 45 – 50, see code generation and declaring attribute, same as "attribute reference"); and

performing the expression to generate at least one of a retrieved data from the database, a value, or a virtual attribute in the at least one logical view (8:49 – 53, see retrieve).

Regarding claim 15, which claims the computer readable memory medium version of claim 7, see rationale above as previously discussed.

Regarding claim 16, the computer-readable medium of claim 15 wherein the computer readable medium is at least one of a memory of the computing device or a data transmission medium transmitting to the computing device a generated data signal containing the contents (5: 8 – 11, see transmission to the client).

Regarding claim 17, the computer-readable medium of claim 15 wherein the contents are instructions that, when executed, cause the computing device to perform the method (29:60 – 67).

Regarding claim 18, which claims the software tool version of claim 7, see rationale above as previously discussed.

Regarding claim 19, which claims the software tool version of claim 8, see rationale above as previously discussed.

Regarding claim 20, which claims the software tool version of claim 10, see rationale above as previously discussed.

Regarding claim 21, Williams anticipates a computer-implemented method for generating an object of any class according to an abstract object model for use as a reusable software component, comprising:

instantiating code for the object that corresponds to a plurality of uniform functions (39:40 – 45);

instantiating code for the object that corresponds to at least one abstraction conversion tool (39:40 – 45); and

instantiating code for the object that implements a plurality of object behaviors including notification of a change to an attribute of the object, notification of an addition of an attribute to the object, and notification of a removal of an attribute of the object (19:57 – 65, uses java bean objects, also see change).

Regarding claim 22, the method of claim 21 wherein the instantiating code that corresponds to the plurality of uniform functions comprises:

instantiating code for the object that implements functions to read an attribute of the object, write an attribute of the object, get attribute names of the object, invoke a behavior on the object, and get related objects (19:55 – 67).

Regarding claim 23, the method of claim 21, further comprising: instantiating code for the object that implements a plurality of object behaviors including notification of adding an object to a set of objects and notification of deleting an object from a set of objects (40:27 – 35, see create object for adding).

Regarding claim 24, the method of claim 21 wherein the instantiating code for the object that corresponds to at least one abstraction conversion tool further comprises: instantiating code for the object the corresponds to an abstraction conversion tool that implements operations that correspond to at least one of object masquerading, object selection, object projection, object concatenation, object joins, property calculations, object bridging, object monitors, or system wrappers (19:55 – 67).

Regarding claim 25, the method of claim 21 wherein the generated object

is a join engine that implements logical views of normalized tables in a relational

database (5:5 – 15).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

6.   Claims 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Williams USPN 6,591,272 as applied in claim 7 in view of Hayes US

2002/0046204 A1.

Regarding claim 13, Williams discloses all the claimed limitations as

applied in claim 7 above. Williams doesn't explicitly disclose a join cache to

persistently maintain linkages between the stored tables and attributes. However,

Hayes in an analogous art and similar configuration teaches that, "Caches

typically store information about data definitions in memory to help the database

engine improve performance" [0005]. Therefore it would have been obvious to

one of ordinary skill in the art at the time the invention was made to combine,

Williams and Hayes, because using a cache would make the system more efficient.

Regarding claim 14, the method of claim 13, further comprising:

determining whether the data in columns represented by the join cache has changed (Hayes, see section [0005] for cache also see joining); and

when it is determined that the data in the columns represented by the join cached has change, recalculating the join thereby updating the at least one logical view (5:33 – 38, see update and modify).

7.   Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams USPN 6,591,272 as applied in claim 21 in view of Rosebrugh USPN 5,630,168.

Regarding claim 26, Williams teaches all the claimed limitations as applied in claim 21. Williams doesn't explicitly disclose wherein the generated object is used to create a power flow application. However, in a similar configuration and analogous art Rosebrugh does teach managing a power flow application in a data acquisition system (database) (FIG.2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine, Williams and Rosebrugh, because using a database to manage the power flow system would enable it to be reusable.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection

presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as

set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Chuck Kendall whose telephone number is

571-272-3698. The examiner can normally be reached on 10:00 am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Tuan Dam can be reached on 571-272-3695. The fax

phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ck.

TUAN DAM
SUPERVISORY PATENT EXAMINER